... SEPTEMBER 2013 CLIMATE SUMMARY...

SUMMARY FOR THE SAN FRANCISCO BAY AREA AND MONTEREY BAY AREA...

SEPTEMBER 2013 WAS CHARACTERIZED BY A WIDE VARIETY OF WEATHER...INCLUDING HUMID CONDITIONS AT THE START OF THE MONTH...A BRIEF HEAT WAVE FROM THE 6TH THROUGH THE 8TH...A SOAKING RAIN ON THE 21ST...AND BREEZY DRY WEATHER NEAR THE END OF THE MONTH.

FOR THE FIRST COUPLE OF DAYS IN SEPTEMBER AN UPPER TROUGH WAS LOCATED OFF THE WEST COAST AND AN UPPER LEVEL HIGH PRESSURE RIDGE WAS CENTERED OVER THE DESERT SOUTHWEST. IN BETWEEN THESE TWO SYSTEMS SOUTHERLY FLOW DEVELOPED ACROSS CALIFORNIA AND ADVECTED A MOIST AIRMASS ACROSS THE REGION...CREATING MUGGY CONDITIONS DURING THE LABOR DAY WEEKEND. ISOLATED SHOWERS MOVED ACROSS THE EAST BAY SHORTLY AFTER MIDNIGHT ON THE 1ST...BUT OTHERWISE THIS MOIST AIRMASS DID NOT RESULT IN MUCH IN THE WAY OF PRECIPITATION. PLENTIFUL MID AND HIGH LEVEL CLOUDS MADE FOR SOME SPECTACULAR SUNRISES AND SUNSETS ON THE FIRST TWO DAYS OF SEPTEMBER.

THE WARMEST WEATHER OF THE MONTH OCCURRED ON THE 6TH...7TH AND 8TH WHEN A RIDGE OF HIGH PRESSURE DEVELOPED ALOFT...ALONG WITH LIGHT OFFSHORE FLOW. HIGH TEMPERATURES WERE IN THE 70S AND 80S NEAR THE COAST ON THE 6TH AND 7TH...WITH INLAND AREAS IN THE 90S TO AROUND 100. ONSHORE FLOW RETURNED BY THE 8TH...RESULTING IN COOLING OF AS MUCH AS 15 DEGREES NEAR THE COAST. BUT VERY WARM WEATHER CONTINUED FOR INLAND AREAS ON THE 8TH. NEAR THE END OF THE HEAT WAVE...DURING THE EARLY AFTERNOON HOURS OF SEPTEMBER 8TH...A WILDFIRE BEGAN ON THE EASTERN SLOPE OF MOUNT DIABLO. CALLED THE MORGAN FIRE...IT EVENTUALLY BURNED OVER 3100 ACRES ON THE EAST AND SOUTH SIDES OF MOUNT DIABLO AND WAS NOT FULLY CONTAINED UNTIL THE 14TH.

AVERAGE TEMPERATURES FOR THE MONTH WERE WITHIN A FEW DEGREES OF NORMAL AT NEARLY ALL CLIMATE STATIONS. THE EXCEPTIONS WERE COOLER-THAN-NORMAL AVERAGE TEMPERATURES AT THE HIGHER ELEVATION CLIMATE STATIONS OF MOUNT DIABLO JUNCTION AND MOUNT HAMILTON...AND WARMER-THAN-NORMAL CONDITIONS IN SANTA CRUZ.

A COLD FRONT SWEPT THROUGH THE AREA ON SATURDAY SEPTEMBER 21ST...WHICH HAPPENED TO BE THE FINAL DAY OF SUMMER...AND BROUGHT SOME MUCH NEEDED RAINFALL TO THE REGION. THIS WAS THE MOST SIGNIFICANT RAIN EVENT TO OCCUR IN THE SAN FRANCISCO BAY AREA SINCE APRIL 4TH. RAIN BEGAN IN THE NORTH BAY AROUND MIDNIGHT ON FRIDAY NIGHT AND PRESSED SOUTH ACROSS THE REMAINDER OF THE BAY AREA DURING THE MORNING AND EARLY AFTERNOON HOURS OF SATURDAY. RAIN WAS BRIEFLY HEAVY JUST PRIOR TO COLD FRONTAL PASSAGE AND RAINFALL TOTALS WITH THIS WEATHER SYSTEM WERE MUCH HIGHER THAN ANTICIPATED ACROSS THE SAN FRANCISCO BAY AREA. 1.5 INCHES OF RAIN FELL ON MOUNT TAMALPAIS IN MARIN COUNTY. ISOLATED 1 INCH TOTALS OCCURRED IN THE NORTH BAY MOUNTAINS AND EAST BAY HILLS. ELSEWHERE IN THE SAN FRANCISCO BAY AREA...RAIN TOTALS ON THE 21ST GENERALLY RANGED FROM 0.25 TO 0.75 INCHES. THESE RAIN AMOUNTS EASILY BROKE DAILY RAINFALL RECORDS FOR MOST LOCATIONS. THE COLD FRONT WEAKENED

RAPIDLY AS IT PRESSED SOUTH INTO THE MONTEREY BAY AREA ON SATURDAY AFTERNOON. RAIN TOTALS FROM MONTEREY BAY SOUTHWARD WERE MOSTLY LESS THAN A QUARTER OF AN INCH AND IN AND SOME CASES JUST A FEW HUNDREDTHS.

THE RAIN THAT FELL ON THE 21ST WAS THE ONLY RAINFALL DURING SEPTEMBER AT MOST CLIMATE STATIONS. BUT BECAUSE RAIN AMOUNTS WITH THE 21ST EVENT WERE UNUSUALLY HEAVY FOR SEPTEMBER...RAIN TOTALS FOR THE MONTH WERE WELL ABOVE NORMAL AT MOST SAN FRANCISCO BAY AREA CLIMATE STATIONS. IN CONTRAST...RAIN TOTALS FOR SEPTEMBER FOR SANTA CRUZ COUNTY...SOUTHERN SANTA CLARA COUNTY...AND POINTS SOUTH WERE WELL BELOW THE 30-YEAR AVERAGE.

LOCALLY STRONG AND GUSTY OFFSHORE WINDS DEVELOPED LATE WEDNESDAY NIGHT AND INTO THURSDAY MORNING...SEPTEMBER 26TH. STRONGEST WINDS WERE IN THE NORTH AND EAST BAY HILLS WHERE LOCAL GUSTS IN EXCESS OF 50 MPH WERE OBSERVED. THESE STRONG OFFSHORE WINDS BROUGHT A VERY DRY AIRMASS INTO THE REGION. THE COMBINATION OF GUSTY WINDS AND VERY DRY AIR PROMPTED ISSUANCE OF RED FLAG WARNINGS FOR HIGH FIRE DANGER ACROSS THE HILLS OF THE SAN FRANCISCO BAY AREA FOR THE 26TH AND 27TH.

A POWERFUL STORM DEVELOPED IN THE NORTHEAST PACIFIC LATE IN SEPTEMBER. THIS STORM...WHICH CONTAINED REMNANTS OF TYPHOON PABUK...SLAMMED INTO THE PACIFIC NORTHWEST DURING THE FINAL WEEKEND OF SEPTEMBER. THE SOUTHERN FRINGES OF THIS STORM CLIPPED THE NORTH BAY LATE ON SUNDAY THE 29TH. RAINFALL AMOUNTS IN THE NORTH BAY WERE GENERALLY LESS THAN A TENTH OF AN INCH.

## ... SEPTEMBER REGIONAL TEMPERATURE SUMMARY...

LOCATION	AVG HIGH	NORMAL HIGH	DEPARTURE FROM NORMAL	AVG LOW	NORMAL LOW	DEPARTURE FROM NORMAL
NORTH BAY						
ANGWIN CALISTOGA CLOVERDALE KENTFIELD NAPA AIRPORT OCCIDENTAL PETALUMA AIRPORT SAINT HELENA SANTA ROSA AP SONOMA	86.0 85.8 80.6 80.8 75.1 79.6 85.0 82.0	76.9 81.7 86.0 83.2	-3.3 -1.9 -2.6 -0.6 1.1 -1.8 -2.1 -1.0 -1.2	52.5 49.3 54.6 55.2 51.1 52.5 52.1 55.1 50.0 52.8	53.8 50.2 54.2 52.2 49.2 53.6 51.2 52.3 49.3 50.5	1.9 -1.1 0.9 2.8
SAN FRANCISCO PENINSULA						
HALF MOON BAY REDWOOD CITY	68.1 78.7	66.4 79.7		52.4 56.1		2.6

SAN FRANCISCO						
	73.8	73.6	0.2	57.2	55.8	1.4
DOWNTOWN	70.2	70.2	0.0	56.7	55.1	1.6
WOODSIDE						
EAST BAY						
ANTIOCH	83.7	86.0	-2.3	59.7	57.3	2.4
CONCORD CONCORD AIRPORT	83.3	85.3	-2.0	59.4	57.0 56.1	2.4
	81.8	84.1	-2.3	56.5	56.1	0.4
FREMONT				56.7		
HAYWARD AIRPORT	/4.1	/5.6	-1.5	55.4	5/.1	-l./
LIVERMORE LIVERMORE AP	81 N	843	-2.3 -0.3	50.U 57.5	54.9 55.5	2 0
MOUNT DIABLO						
JUNCTION	75.9	81.7	-5.8	55.3	57.8	-2.5
NEWARK	75.7	77.1	-1.4	58.7 58.1	57.5	1.2
OAKLAND	76.1	74.1	2.0	58.1	57.1	1.0
OAKLAND AIRPORT	74.8	74.6	0.2	57.1	54.4	2.7
SOUTH BAY AND SANT	'A CRUZ	COUNT	Υ			
GILROY	82.7	85.5	-2.8	53.1	52.8	0.3
LOS GATOS	81.6	82.0	-0.4	54.2	53.2	1.0
MOFFETT FIELD MOUNT HAMILTON	78.1	77.5	0.6	58.1	57.7	0.4
MOUNT HAMILTON	69.9	73.3	-3.4	55.2	59.4	-4.2
SAN JOSE	79.0	80.1	-1.1	57.3	56.8	0.5
SANTA CRUZ	80.7	76.4	4.3	53.7	53.0	0.7
SANTA CRUZ WATSONVILLE WATSONVILLE AP	77.2	73.6	3.6	52.3	52.5	-0.2
WATSONVILLE AP	77.6	75.1	2.5	52.6	51.8	0.8
MONTEREY AND SAN B	BENITO	COUNTIE	ES			
BIG SUR STATION	79.3	77.1	2.2	50.8	50.3	0.5
CARMEL VALLEY	80.5	81.3	-0.8	49.9	51.0	-1.1
HOLLISTER	81.9	81.4	0.5	54.2	52.2	
KING CITY MONTEREY	84.3	85.5	-1.2	51.7 53.9	51.1	0.6
MONTEREY	70.7	69.6	1.1	53.9		
MONTEREY AIRPORT	71.1	69.3	1.8	54.9		
SALINAS	76.1	74.0	2.1	52.8	52.2	0.6
SALINAS AIRPORT	76.3	74.1	2.2	55.5	54.3	1.2

## ...SEPTEMBER REGIONAL PRECIPITATION SUMMARY...

	AVERAGE			
	SEPT	SEPT	PERCENT	
LOCATION	TOTAL	PRECIP	OF NORMAL	
NORTH BAY				
ANGWTN	1.04	0.46	226	

CALISTOGA CLOVERDALE KENTFIELD MUIR WOODS NAPA NAPA AIRPORT OCCIDENTAL PETALUMA AIRPORT SAINT HELENA SAN RAFAEL SANTA ROSA AP SONOMA	0.12 0.50 0.59 0.69 0.67 0.84 1.06 0.61 0.45 0.59 0.49	0.32 0.32 0.26 0.36 0.30 0.32 0.42 0.21 0.28 0.21 0.35 0.24	38 156 227 192 223 263 252 290 161 281 140 179
SAN FRANCISCO PEN	IINSULA		
HALF MOON BAY PALO ALTO SAN FRANCISCO AE SAN FRANCISCO WOODSIDE	0.85 0.42 0.23 0.39 0.69	0.37 0.15 0.17 0.21 0.17	230 280 135 186 406
EAST BAY			
ANTIOCH CONCORD CONCORD AIRPORT FREMONT HAYWARD AIRPORT LIVERMORE LIVERMORE AP	0.62	0.18 0.10 0.16 0.21 0.32 0.22 0.22	278 700 413 295 69 150 214
MOUNT DIABLO JUNCTION NEWARK OAKLAND OAKLAND AIRPORT RICHMOND	1.11 0.50 0.34 0.61 0.53	0.28 0.17 0.25 0.22 0.16	396 294 136 277 331
SOUTH BAY AND SAN	ITA CRUZ C	COUNTY	
BEN LOMOND GILROY LOS GATOS MOFFETT FIELD MOUNT HAMILTON SAN JOSE SANTA CRUZ WATSONVILLE WATSONVILLE	0.66 0.19 0.06	0.27 0.24 0.18 0.18 0.38 0.18 0.27 0.21	148 8 39 278 263 367 70 29 35
MONTEREY AND SAN	BENITO CC	OUNTIES	
BIG SUR STATION CARMEL VALLEY		0.42 0.23	52 22

HOLLISTER	0.11	0.21	52
KING CITY	0.01	0.15	7
MONTEREY	0.02	0.24	8
MONTEREY AIRPORT	0.03	0.20	15
SALINAS	0.14	0.19	74
SALINAS AIRPORT	0.09	0.17	53

## ...MONTHLY RANKS FOR DOWNTOWN SAN FRANCISCO...

AVERAGE HIGH TEMPERATURE.....70.2....43RD WARMEST OUT OF 140 YEARS AVERAGE LOW TEMPERATURE.....52.2....22ND WARMEST OUT OF 140 YEARS

PRECIPITATION......0.39 INCHES....32ND WETTEST OUT OF 161 YEARS

## ...MONTHLY EXTREMES FOR SELECT LOCATIONS...

LOCATION	MAX TEMP:	MIN TEMP:	PRECIP:
	WARMEST	COOLEST	WETTEST
	DAY(S)	DAY(S)	DAY(S)
SANTA ROSA AIRPORT	9/07	9/20	9/21
	96 DEG	41 DEG	0.24 IN
SAN FRANCISCO	9/07	9/26	9/21
	83 DEG	53 DEG	0.39 IN
LIVERMORE AIRPORT	9/09	9/26	9/21
	102 DEG	47 DEG	0.46 IN
SAN JOSE	9/07	9/27	9/21
	95 DEG	49 DEG	0.66 IN
SALINAS AIRPORT	9/06	9/27	9/21
	85 DEG	45 DEG	0.07 IN

NOTE: THIS CLIMATOLOGICAL DATA IS PRELIMINARY. FOR OFFICIAL CERTIFIED CLIMATOLOGICAL DATA PLEASE CONTACT THE NATIONAL CLIMATIC DATA CENTER AT 828-271-4800 OR http://www.ncdc.noaa.gov.OFFICIAL VALUES AS DETERMINED AT THE ABOVE WEB SITE MAY TAKE SEVERAL MONTHS FOR AUTHENTICATION AND PUBLICATION.

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